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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

• 5	Application No.	Applicant(s)				
	09/929,886	ALLEN ET AL.				
Office Action Summary	Examiner	Art Unit				
	SIEGFRIED E. CHENCINSKI	3691				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠ Responsive to communication(s) filed on 07 Ja	nuarv 2008.					
	action is non-final.					
· <u>-</u>	/ <del></del>					
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 12-15.17-19.21-24,42,43,46-50,52-57	and 87-89 is/are pending in the	application.				
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) 12-15, 17-19, 21-24,42,43,46-50, 52-57 and 87-89 is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)  1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date.						
3) Information Disclosure Statement(s) (PTO/SB/08)	5) Notice of Informal Pa	atent Application				
Paper No(s)/Mail Date  5. Patent and Trademark Office	6)  Other:					

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## **DETAILED ACTION**

#### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 7, 2008 has been entered.

# Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 12-15, 17-19, 21-24, 42, 43, 46-50, 52-57 and 87-89 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The independent claims contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The description of the "parity divisor" has a mathematically impossible relationship, namely the divisor of zero, which is mathematically impossible because the product of the equation is infinity. Further, given the specific conflicting meaning of the expression "parity divisor" in the financial exchange industry, the ordinary practitioner would have been confused in replicating the invention without undue experimentation.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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3. Claims 12-15, 17-19, 21-24, 42, 43, 46-50, 52-57 and 87-89 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention because the independent claims contain he term "parity divisor" which is described in the specification in a manner which is repugnant to the manner in which the stock market industry in which Applicant's invention operated uses the term.

The term "parity divisor" at the time of Applicant's invention is a generic term used in numerous ways in the financial industry long before Applicant's invention, especially in the trading and processing of currencies and securities such a debt and equities. The root word was and is "par" which has a specific definition in Barron's Dictionary of Finance, Fifth Edition, 1998 ("equal to the nominal value or FACE VALUE of a security, "most commonly "an assigned amount used to compute the dollar accounting value ... on a company's balance sheet (p. 432). "Par Value" also pertains to bonds and preferred stock. Also related are the terms "conversion parity" (p. 433) and "parity price" (related to "the common stock price at which a convertible security becomes exchangeable for common shares of equal value" - p. 119). A prior art specific application of the term "parity divisor" consistent with the above definition and usage is contained in an SEC filing by the Morgan Stanley Group Inc. dated 7/29/96 which uses the expression in the above context where the expression is related to the true mathematical meaning of a divisor regarding a dollar value of a Nikkei index. In the case of Applicant's use of the term is defined in the context of order processing steps which conform to Securities Exchange processing rules settings such as the New York Stock Exchange, American Stock Exchange and Philadelphia Stock Exchange (p. 5, II. 20-24) defined and described in the specification in pp. 23-25. This definition really seems misleading in the context of the financial stock exchange trading industry in which it is used because it really relates to arbitrary transaction processing codes which actually define processing status labels and not the mathematically meaningful relationships which govern the industry's broad, well known and mathematically consistent use of the terminology. As such, in the context of patentable novelty, Applicant's term violates a court's holding of an Applicant's right to be his own lexicographer because it violates the

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well understood meaning of the term in the industry environment in which Applicant is using it. The court called such usage "repugnant" to the meaning of the language.

MPEP 2173.05(a) III. states the following" "Until the meaning of a term or phrase used in a claim is clear, a rejection under <u>35 U.S.C. 112</u>, second paragraph is appropriate. In applying the prior art, the claims should be construed to encompass all definitions that are consistent with applicant's use of the term. See *Tex. Digital Sys., Inc. v. Telegenix, Inc.*, 308 F.3d 1193, 1202, 64 USPQ2d 1812, 1818 (Fed. Cir. 2002). It is appropriate to compare the meaning of terms given in technical dictionaries in order to ascertain the accepted meaning of a term in the art. *In re Barr*, 444 F.2d 588, 170 USPQ 330 (CCPA 1971). >See also MPEP § 2111.01.<".

ALSO per the MPEP in a section titled "Terminology Inconsistent with Accepted Meaning":

Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. Process Control Corp. v. HydReclaim Corp., 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999).

In the instant case, the term "parity divisor" in independent claims 12, 21, 22, 23, 24, 42, 52, 54 and 87 is used by the claim to mean six processing options for "a numeric code that a display book user, typically specialist 107, enters for both the bid and offer side. The divisor indicates how system 100 will assign contra sides to an automatically executed NX order. Each stock in a display book has its own parity divisor settings." (specification, p. 23, II. 10-15), while the accepted meaning is a mathematically based index relating to the value of a specific traded financial instrument or index. The term is indefinite because the specification does not clearly redefine the term in a manner which would be consistent within the financial exchange industry. Further, Applicant's specification has failed to reconcile the conflict in usage presented above, as required by the MPEP.

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## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 3. Claims 12 & 21, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cristofich et al. (US 6,173,270 B1, hereafter Cristofich), Applicant Admitted Prior Art (hereafter AAPA) and Speech by SEC Commissioner Cynthia A. Glassman (Glassman).
- Re. Claims 12, 20-22, Cristofich discloses a method, executable software, computer-readable medium and a programmed computer for automatically processing a securities order on a securities exchange directed at a stock option control and exercise system operated through a stock exchange. Cristofich does not explicitly disclose the narrow particulars of a method, executable software, computer-readable medium and a programmed computer for automatically processing a securities order on a securities exchange, the method comprising:
  - · automatically receiving a securities order;
  - automatically determining whether the securities order includes an indicator requesting automatic execution;
  - exposing the order for possible price improvement if the securities order does not include an indicator requesting automatic execution; and
  - automatically executing at least a portion of the order at a quote price, without
    exposing the order for possible price improvement, if the securities order includes
    an indicator requesting automatic execution;
  - determining a parity divisor; and
  - automatically allocating shares of the automatic execution among contra parties according to the parity divisor.

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Regarding the term "parity divisor", this expression merely represents a generic set of steps used to sort the results of a trade in six possible ways which conform to exchange rules (NYSE Rule 72). As such, the steps of determining a parity divisor (by "a display book user, typically a specialist") and the automatic allocation of shares among contra parties would have been an obvious option to an ordinary practitioner of the art to establish. Please see the rejection under 35 USC 112, 2<sup>nd</sup> paragraph for further rationale.

Further, AAPA discloses in the specification:

- an auction market on the floor of an exchange (p. 1, ll. 16-17);
- a limit order and a market order (p. 1, II. 16-17);
- price improvement potential through competition among the crowd on the market floor (p. 1, II. 18-20);
- an electronic specialist display book (p. 1, l. 22);
- an opportunity to execute an order against other electronic orders on the specialist display book (p. 1, II. 20-24);
- interest on the part of some investors and institutions in having a transaction execute at a known price (p. 1. II. 24-25);
- interest on the part of some investors and institutions in having a transaction execute at a known price while foregoing an opportunity for possible price improvement on the auction floor (p. 1. II. 24-25);
- the desirability on the part of some investors and institutions in having a
  transaction execute at a known price if the transaction will execute in a more
  timely fashion than is available with the traditional auction transaction (p. 2, II. 12).

The stock exchanges are regulated by government agencies and also by the rules of each exchange. As such, the brokers serving buyers and sellers of publicly traded shares have a fiduciary responsibility to always obtain the best available price for the customer for buy and sell orders. There are detailed guidelines for the execution of this responsibility. Also, Applicant's specification defines at least some embodiments of the

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invention which involve a customer's specifying "automatic execution" of an order as related to a customer's limit order (specification, p. 20, II. 7 – p. 21, I. 3). In this embodiment, the transaction executes in the same manner as a limit order without Applicant's "indication" through an 'NX" designation for the transaction prior to Applicant's invention. The price of the limit order would be the same with or without Applicant's invention. If the specialist has offers in hand which are equal to or better than the customer's limit price and if the other parameters of the customer's order are satisfied in all respects the order would execute without going to the floor. Applicant's designation by the customer of "automatic execution" of the order in the claimed limitations and as supported by the specification would be a convenience which has no substantive role in the process or method. In other words, an automatic indication symbol such as "NX" is non-functional descriptive material in the context of patentability. The indication and the indicator symbol may well be a convenience with positive marketing appeal, but it does not receive patentable weight.

Cristofich discloses a method, executable software, computer-readable medium and a programmed computer for:

- automatically receiving a securities order (Col. 9, I. 19-20), the securities order including an indicator requesting automatic execution (Cristofich discloses the fulfilling of customer requests Col. 3, I. 47. It would have been obvious to an ordinary practitioner to offer automatic execution and to fulfill such a request when so made.); and
- automatically executing at least a portion of the order at a quote price (Cristofich, Col. 9, II. 15-20) without exposing the order for possible price improvement. (It is implicit in Cristofich to automatically fulfill customer orders at a quote price when a customer's conditions are met, such as when the customer's buy price is met by a quote price. Col. 9, II. 15-20. It is implicit that no attempt is made to expose the order for possible price improvement).

Therefore, an ordinary practitioner of the art at the time of Applicant's invention would have seen it as obvious to have used the disclosures of Cristofich, AAPA and Glassman to provide a method for automatically processing a securities order on a securities

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exchange, motivated by a desire to provide a data processing method and system for managing individual accounts directed to the transacting of securities transactions with pre-established criteria (Cristofich, Col. 2, II. 29-33).

**Re. Claims 13-15**, Cristofich discloses wherein the securities order is a limit order (Col. 11, II. 4-5) or a market order (Col. 10, II. 23-25), and an execution report (Col. 10, II. 15-17).

Re. Claim 17, Cristofich does not explicitly disclose at least partially fulfilling the order from a display book order. However, AAPA discloses at least partially fulfilling the order from a display book order. Therefore, an ordinary practitioner of the art at the time of Applicant's invention would have seen it as obvious to have used the disclosures of Cristofich, AAPA and Glassman to provide a method for automatically processing a securities order on a securities exchange, including the step of at least partially fulfilling the order from a display book order, motivated by a desire to provide a data processing method and system for managing individual accounts directed to the transacting of securities transactions with pre-established criteria (Cristofich, Col. 2, Il. 29-33). Re. Claim 18, please see the rejection of claim 16 regarding automatically executing an order without going to counter parties and/or the market crowd. AAPA discloses fulfilling an order through an auction market crowd by fulfilling the order from one's own inventory. It would have been obvious at the time of Applicant's invention to fulfill an order partially through a counter party such as potentially identified from an auction market crowd. Therefore, an ordinary practitioner of the art at the time of Applicant's invention would have seen it as obvious to have used the disclosures of Cristofich, AAPA and Glassman to provide a method for automatically processing a securities order on a securities exchange, including the step of at least partially fulfilling the order from an auction market crowd after automatically executing the order, motivated by a desire to provide a data processing method and system for managing individual accounts directed to the transacting of securities transactions with pre-established criteria (Cristofich, Col. 2, II. 29-33).

Re. Claim 19, neither Cristofich nor AAPA or Glassman explicitly disclose at least partially fulfilling the order from a display book order after automatically executing the

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order. However, it would have been obvious to an ordinary practitioner of the art at the time of Applicant's invention to at least partially fulfill the order from a display book order (see the rejection of claim 17) after automatically executing the order (see the rejection of claim 16 and 18). Therefore, an ordinary practitioner of the art at the time of Applicant's invention would have seen it as obvious to have used the disclosures of Cristofich, AAPA and Glassman to provide a method for automatically processing a securities order on a securities exchange, including the step of at least partially fulfilling the order from a display book order after automatically executing the order, motivated by a desire to provide a data processing method and system for managing individual accounts directed to the transacting of securities transactions with pre-established criteria (Cristofich, Col. 2, II. 29-33).

**Re. Claim 23**, Cristofich does not explicitly disclose the narrow particulars of a method, executable software, computer-readable medium and a programmed computer for automatically processing a limit buy or sell order for a security on a securities exchange with an auction market crowd, the method comprising:

- · automatically receiving the limit order for the security;
- automatically determining whether the limit order includes an indicator requesting automatic execution;
- automatically determining whether the limit order qualifies for automatic execution;
- exposing the limit order to the auction market crowd for possible price improvement if the limit order does not include an indicator requesting execution, or if the limit order does not qualify for automatic execution; and
- automatically executing at least a portion of the limit order against a respective
  offer or bid for the security, without exposing the limit order to the auction market
  crowd for possible price improvement, if the securities order includes an indicator
  requesting automatic execution;
- · determining a parity divisor; and

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automatically allocating shares of the automatic execution among contra parties
 according to the parity divisor.

Please see the rejection of claims 12, 20-22 regarding the rejection of the "parity divisor" related limitations.

Further, an ordinary practitioner of the art at the time of Applicant's invention would have seen it as obvious to have used the disclosures of Cristofich and AAPA to provide a method for automatically processing a securities order on a securities exchange as discussed in the rejection of claim 12 above. Further AAPA discloses limit orders (with sell and buy order implicit). Also, Glassman discloses the fiduciary responsibilities of securities brokers. Therefore, it would have been obvious to an ordinary practitioner of the art at the time of Applicant's invention would have seen it as obvious to have used the disclosures of Cristofich, AAPA and Glassman to provide a method for automatically processing a securities order on a securities exchange, including limit buy or sell orders, motivated by a desire to provide a data processing method and system for managing individual accounts directed to the transacting of securities transactions with preestablished criteria (Cristofich, Col. 2, II. 29-33).

**Re. Claim 24**, Cristofich does not explicitly disclose the narrow particulars of a method, executable software, computer-readable medium and a programmed computer for automatically processing a market buy or sell order for a security on a securities exchange with an auction market crowd, the method comprising:

- automatically receiving the market order for the security;
- automatically determining <u>whether</u> the market order includes an indicator requesting automatic execution;
- automatically determining <u>whether</u> the market order qualifies for automatic execution;
- Exposing the market order to the auction market crowd for possible price
   improvement if the market order does not include an indicator requesting
   execution, or if the market order does not qualify for automatic execution; and

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automatically executing at least a portion of the market order against a respective
offer or bid for the security, without exposing the market order to the auction
market crowd for possible price improvement, if the market order includes an
indicator requesting automatic execution and the market order qualifies for
automatic execution;

- · determining a parity divisor; and
- automatically allocating shares of the automatic execution among contra parties according to the parity divisor.

Please see the rejection of claims 12, 20-22 regarding the rejection of the "parity divisor" related limitations.

Further, an ordinary practitioner of the art at the time of Applicant's invention would have seen it as obvious to have used the disclosures of Cristofich and AAPA to provide a method for automatically processing a securities order on a securities exchange as discussed in the rejection of claim 12 above. Further AAPA discloses market orders (with sell and buy order implicit). Also, Glassman discloses the fiduciary responsibilities of securities brokers. Therefore, it would have been obvious to an ordinary practitioner of the art at the time of Applicant's invention would have seen it as obvious to have used the disclosures of Cristofich, AAPA and Glassman to provide a method for automatically processing a securities order on a securities exchange, including market buy or sell orders, motivated by a desire to provide a data processing method and system for managing individual accounts directed to the transacting of securities transactions with pre-established criteria (Cristofich, Col. 2, II. 29-33).

Re. Claims 42, 52 & 53, Cristofich does not explicitly disclose the narrow particulars of a method, executable software, computer-readable medium and a programmed computer for processing a securities order on a securities exchange, the method comprising:

- receiving the securities order;
- <u>determining whether the securities order includes</u> an indicator requesting automatic execution and a price of the order;
- exposing the securities order for possible price improvement if the securities

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order does not include an indicator requesting automatic execution;

- comparing the price of the order to a quote <u>if the securities order includes an</u> <u>indicator requesting automatic execution</u>; and
- changing the status of the order from automatic execution to regular execution <u>if</u>
   the securities order includes an indicator requesting automatic execution and the
   price of the order is not equal to or better than the quote;
- automatically executing the order on an auction market of the securities exchange;
- determining a parity divisor; and
- automatically allocating shares of the automatic execution among contra parties according to the parity divisor.

Please see the rejection of claims 12, 20-22 regarding the rejection of the "parity divisor" related limitations.

However, an ordinary practitioner of the art at the time of Applicant's invention would have seen it as obvious to have used the disclosures of Cristofich and AAPA to provide a method for automatically executing and processing a securities order on a securities exchange as discussed in the rejection of claim 12 above, and to see an implicit comparing step involved in validating an order for automatic execution. Also, Glassman discloses the fiduciary responsibilities of securities brokers. Further, AAPA discloses limit orders and market orders (with sell and buy orders implicit). It would have been obvious to change the status of an order from automatic execution to regular execution if the price of the order is not equal to or better than the quote since normally a brokerage firm is in business to make a profit. Disregarding the subject of commissions charged for trades, a buy order in this instance set for automatic execution which is not equal to or better than a quote would produce a loss for the brokerage firm, thus forcing the order to be changed from automatic to regular execution. Regular execution in the trading of securities means seeking counter parties who are willing to accept this buy order at the offered buy price. Such a fixed buy price is otherwise called a limit buy order, since it is not a market buy order which will pay any price offered by a seller

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during the customer authorized time period of the market buy order. Therefore, it would have been obvious to an ordinary practitioner of the art at the time of Applicant's invention to have seen it as obvious to have used the disclosures of Cristofich, AAPA and Glassman to provide a method for automatically processing a securities order on a securities exchange, including changing the status of the order from automatic execution to regular execution if the price of the order is not equal to or better than the quote, motivated by a desire to provide a data processing method and system for managing individual accounts directed to the transacting of securities transactions with preestablished criteria (Cristofich, Col. 2, II. 29-33).

**Re. Claim 46**, Cristofich discloses sending an execution report for the order (Col. 10, II. 15-17).

Re. Claims 47 and 48, Cristofich does not explicitly disclose:

Re. Claim 47, at least partially fulfilling the order from a display book order.

Re. Claim 48, comprising at least partially fulfilling the order with an order from an auction market crowd.

#### However:

Re. Claim 47, at least partially fulfilling the order from a display book order (please see the rejection of claim 17).

Re. Claim 48, AAPA discloses at least partially fulfilling the order with an order from an auction market crowd (page 1, ll. 16-24).

Therefore, it would have been obvious to an ordinary practitioner of the art at the time of Applicant's invention to have seen it as obvious to have used the disclosures of Cristofich and AAPA to provide a method for automatically processing a securities order on a securities exchange, including exposing the order to an auction market crowd for possible price improvement, executing the order on an auction market of the securities exchange, at least partially fulfilling the order from a display book order and at least partially fulfilling the order with an order from an auction market crowd, motivated by a desire to provide a data processing method and system for managing individual accounts directed to the transacting of securities transactions with pre-established criteria (Cristofich, Col. 2, II. 29-33).

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**Re. Claim 54**, neither Cristofich nor AAPA explicitly disclose the exact detailed sequence of a method for processing a securities order on a securities exchange, the method comprising:

- · receiving the securities order;
- determining whether the securities order includes an indicator requesting automatic execution and a size of the order;
- exposing the securities order for possible price improvement if the securities
   order does not include an indicator requesting automatic execution;
- comparing the size of the order to a respective interest in the security <u>if the</u> securities order includes an indicator requesting automatic execution; and
- changing the status of at least a portion of the order from automatic execution to regular execution the securities order includes an indicator requesting automatic execution and if the size of the order is greater than the interest;
- automatically executing the order on an auction market of the securities exchange;
- · determining a parity divisor; and
- automatically allocating shares of the automatic execution among contra parties according to the parity divisor.

Please see the rejection of claims 12, 20-22 regarding the rejection of the "parity divisor" related limitations.

Further, an ordinary practitioner of the art at the time of Applicant's invention would have seen it as obvious to have used the disclosures of Cristofich and AAPA to provide a method for automatically processing and executing a securities order on a securities exchange as discussed in the rejection of claims 12 and 42 above, and to see an implicit comparing step involved in validating an order for automatic execution. Further, AAPA discloses limit orders and market orders (with sell and buy orders implicit). It would have been obvious to change the status of an order from automatic execution to regular execution if the respective interest in the security does not meet the size of the security being offered, since no exact matching counter party offer is available for

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automatic execution. Some examples of this condition will exist if the respective interest is for a smaller quantity or an interest has made itself known for a larger quantity which is unwilling to buy a partial quantity. The ordinary practitioner would have seen it as obvious that the order had to be changed from automatic to regular execution.

Therefore, it would have been obvious to an ordinary practitioner of the art at the time of Applicant's invention to have seen it as obvious to have used the disclosures of Cristofich, AAPA and Glassman to provide a method for converting automatic processing of a securities order to regular processing on a securities exchange, motivated by a desire to provide a data processing method and system for managing individual accounts directed to the transacting of securities transactions with pre-established criteria (Cristofich, Col. 2, II. 29-33).

Re. Claim 55, please see the rejections of claims 12 and 42 above.

Re. Claims 56 & 57, please see the rejections of claims 13 and 14 above.

4. Claims 43 & 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cristofich, AAPA and Glassman as applied to claim 42 above, and further in view of Madoff.

Re. Claims 43 & 49, neither Cristofich, AAPA nor Glassman explicitly disclose wherein:

**Re. Claim 43,** the securities order further includes a size, changing the status of at least a portion of the order from automatic execution to regular execution if the size is greater than the interest.

Re. Claim 49, the quote includes a best bid price for the security, the securities order is a sell order and the price of the order is greater than the best bid price. However, Madoff discloses that auctioning of financial products "involves entering order for products with price, quantity and exposure time is matched with response in accordance with the order's exposure time" (Abstract, II. 4-7).

Re. claim 43, it would have been obvious to an ordinary practitioner that an order received for automatic execution must receive an offer for the same or lower price, the same or lower quantity, and must be received within the time specified unless it is an open order until it is filled.

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**Re. claim 49**, the ordinary practitioner would have seen it as obvious that a sell order priced above the best bid price could not be processed for automatic execution because it would have to go to the market similar to the buy order in claim 43 above which is priced under the market.

Therefore, re. Claims 43 & 49, an ordinary practitioner of the art at the time of Applicant's invention would have seen it as obvious to have used the disclosures of Cristofich, AAPA, Glassman and Madoff to provide a method for automatically processing a securities order on a securities exchange, including the step of changing the status of at least a portion of the order from automatic execution to regular execution if the size is greater than the interest, or a sell order has a price which is greater than the best bid price, motivated by a desire to provide an automated auction system for trading products such as equity securities (Madoff, p. 1, [0001]).

**5.** Claim **50** is rejected under 35 U.S.C. 103(a) as being unpatentable over Cristofich, AAPA and Glassman as applied to claim 42 above, and further in view of Wilton et al. (US patent 6,519,574 B1, hereafter Wilton).

Re. Claim 50, neither Cristofich, AAPA nor Glassman explicitly disclose the exact wording of a quote includes a best offer price for the security, the securities order is a buy order and the price of the order is less than the best offer price. However, Wilton discloses a quote includes a best offer price for the security, the securities order is a buy order and the price of the order is less than the best offer price (Col. 10, II. 7-17). Therefore, an ordinary practitioner of the art at the time of Applicant's invention would have seen it as obvious to have used the disclosures of Cristofich, AAPA, Glassman and Wilton to provide a quote includes a best offer price for the security, the securities order is a buy order and the price of the order is less than the best offer price, including the step of identifying at least one particular contra side for the order after automatically executing the order, motivated by a desire to provide trading data which includes bid and/or offer information input by the trading entity and displaying such data to the trading entity for the purpose of detecting trading opportunities According to various trading parameters established by the trader (Wilton, Abstract – II. 1-14).

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6. Claims 87-89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cristofich in view of AAPA and Hasbrouck, Sofianos and Sosebee (New York Stock Exchange Systems and Trading Procedures, NYSE Working Paper #93-01, Draft 1.2 April 27, 1993, hereafter Hasbrouck).

Re. Claim 87, Cristofich, AAPA and Glassman disclose a method for automatically processing a securities order on a securities exchange, the method comprising: receiving a securities order identified for automatic execution; automatically executing the transaction; and automatically updating the published quote based on the order against a quote (see the rejection of claim 12). Neither Cristofich nor Glassman explicitly disclose the expressions "an auction market crowd", and "a published quote". However, AAPA discloses processing orders with "an auction market crowd" (page 1, Il. 16-24). Further, Hasbrouck discloses published quotes (page 13, I. 13). Therefore, an ordinary practitioner of the art at the time of Applicant's invention would have seen it as obvious to have combined the disclosures of Cristofich, AAPA, Glassman and Hasbrouck in order to provide a method for automatically processing a securities order on a securities exchange with an auction market crowd, motivated by a desire to provide a data processing method and system for managing individual accounts directed to the transacting of securities transactions with pre-established criteria (Cristofich, Col. 2, Il. 29-33).

Please see the rejection of claims 12, 20-22 regarding the rejection of the following limitations: determining a parity divisor; and automatically allocating shares of the automatic execution among contra parties according to the parity divisor.

Re. Claims 88 & 89, it is implicit in exchange procedures that a size of the published quote after updating reflects a size of the order or wherein a size of the published quote after updating represents a minimum quote size, but does not necessarily reflect a size of the transaction.

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## Response to Arguments

**7.** Applicant's arguments filed January 7, 2008 have been fully considered but they are not persuasive.

NEW ARGUMENTS: Applicant presents short summaries of previous arguments which have been thoroughly responded to. These summaries are: (1) "applicants submit that even in combination none of the cited references disclose all of the claim requirements in the original claims", (2) "and further what the Examiner characterizes as AAPA is not admitted prior art." (p. 15, II. 1-3).

## RESPONSE:

- (1) Applicant does not elaborate on the first point about the cited references, which makes this argument moot because it is merely a bald assertion which fails to meet the requirements of a proper traversal.
- (2) Applicant's elaboration on the AAPA argument (p. 15, II. 6-19) also fails to meet the requirements of a proper traversal because this argument is also based on in order to seriously put into question the examiner's properly presented case of obviousness regarding the classification of certain statements in the background section of 'he specification as Applicant Admitted Prior Art (AAPA). Applicant's "express disclaimer" statement at the end of the Background section of the specification cannot make Applicant's description of the prior art in the industry not be admitted prior art, and Applicant has failed to present any rationale that the examiner improperly classified that art as AAPA. Applicant included another bald assertion unsupported by any evidence or rationale that the examiner used improper hindsight construction using the claims as a "map that is based on the applicant's specification" (p. 15, II. 14-16). Please note MPEP 2145 X. A. - HINDSIGHT RECONSTRUCTION: "Applicants may argue that the examiner's conclusion of obviousness is based on improper hindsight reasoning. However, "[a]ny judgement on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and does not include knowledge gleaned only from applicant's disclosure, such a

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reconstruction is proper." *In re McLaughlin* 443 F.2d 1392, 1395, 170 USPQ 209, 212 (CCPA 1971). Applicants may also argue that the combination of two or more references is "hindsight" because "express" motivation to combine the references is lacking. However, there is no requirement that an "express, written motivation to combine must appear in prior art references before a finding of obviousness." See *Ruiz v. A.B. Chance Co.*, 357 F.3d 1270, 1276, 69 USPQ2d 1686, 1690 (Fed. Cir. 2004). For example, motivation to combine prior art references may exist in the nature of the problem to be solved (*Ruiz* at 1276, 69 USPQ2d at 1690) or the knowledge of one of ordinary skill in the art (*National Steel Car v. Canadian Pacific Railway Ltd.*, 357 F.3d 1319, 1338, 69 USPQ2d 1641, 1656 (Fed. Cir. 2004)). See <a href="MPEP § 2143.01">MPEP § 2143.01</a> <2100 2143 01.htm> for a discussion of proper motivation to combine references."

The examiner repeats the Response to Arguments presented in the last Office Action for Applicant's convenience, as follows:

# **ARGUMENT A:** Applicant argues that

- (1) the examiner's characterization of certain information in the Background section of the specification as Applicant Admitted Prior Art (AAPA) is improper,
- (2) that the examiner has used improper hindsight reconstruction "with a map that is based on the applicant's specification" and that "use of hindsight is improper and is not allowed",
- (3) "that it is improper for the Examiner to rely on applicants' own specification as prior art in order to reject the pending claims", and

### **RESPONSE:**

(1) Use of Applicant's information in the Background section of the specification regarding prior art is indeed proper on he basis of the following:

# (a) MPEP 2129. I. ADMISSIONS BY APPLICANT CONSTITUTE PRIOR ART

A statement by an applicant during prosecution identifying the <u>work of another</u> as "prior art" is an admission that that work is available as prior art against the claims, regardless of whether the admitted prior art would otherwise qualify as prior art under the statutory categories of 35 U.S.C.

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102. Riverwood Int'l Corp. v. R.A. Jones & Co., 324 F.3d 1346, 1354, 66 USPQ2d 1331, 1337 (Fed Cir. 2003). However, even if labeled as "prior art," the work of the same inventive entity may not be considered prior art against the claims unless it falls under one of the statutory categories. Id.; see also Reading & Bates Construction Co. v. Baker Energy Resources Corp., 748 F.2d 645, 650, 223 USPQ 1168, 1172 (Fed. Cir. 1984) ("[W]here the inventor continues to improve upon his own work product, his foundational work product should not, without a statutory basis, be treated as prior art solely because he admits knowledge of his own work. It is common sense that an inventor, regardless of an admission, has knowledge of his own work.").

Consequently, the examiner must determine whether the subject matter identified as "prior art" is applicant's own work, or the work of another. In the absence of another credible explanation, examiners should treat such subject matter as the work of another.

(b) Where applicant has clearly admitted on the record that subject matter relied on in the reference is prior art. In this case, that subject matter may be used as a basis for rejecting his or her claims and may not be overcome by an affidavit or declaration under 37 CFR 1.131. In re Hellsund, 474 F.2d 1307, 177 USPQ 170 (CCPA 1973); In re Garfinkel, 437 F.2d 1000, 168 USPQ 659 (CCPA 1971); In re Blout, 333 F.2d 928, 142 USPQ 173 (CCPA 1964); In re Lopresti, 333 F.2d 932, 142 USPQ 177 (CCPA 1964).

## (2) MPEP 2145 X. A. - HINDSIGHT RECONSTRUCTION

Applicants may argue that the examiner's conclusion of obviousness is based on improper hindsight reasoning. However, "[a]ny judgement on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and does not include knowledge gleaned only from applicant's disclosure, such a reconstruction is proper." *In re McLaughlin* 443 F.2d 1392, 1395, 170 USPQ 209, 212 (CCPA 1971). Applicants may also argue that the combination of two or more references is "hindsight" because "express" motivation to combine the references is lacking. However, there is no requirement that an "express, written motivation to combine must appear in prior art references before a finding of obviousness." See *Ruiz v. A.B. Chance Co.*, 357 F.3d 1270, 1276, 69 USPQ2d 1686, 1690 (Fed. Cir. 2004). For example, motivation to combine prior art references may exist in the nature of the problem to be solved (*Ruiz* at 1276, 69 USPQ2d at 1690) or the knowledge of one of ordinary skill in the art (*National Steel Car v. Canadian Pacific Railway Ltd.*, 357 F.3d 1319, 1338, 69 USPQ2d 1641, 1656 (Fed. Cir. 2004)). See <a href="MPEP \& 2143.01 < 2100 2143 01.htm">MPEP \& 2143.01 < 2100 2143 01.htm</a> for a discussion of proper motivation to combine references.

- (3) Please see the response to item (1).
- (4) A mere allegation that the references fail to disclose, teach or suggest all the requirements of the claims fails to satisfy the rebuttal requirements of an examiner's rejections on the following basis:

"[T]he PTO can require an applicant to prove that the prior art products do not

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necessarily or inherently possess the characteristics of his [or her] claimed product. Whether the rejection is based on inherency' under 35 U.S.C. 102, on prima facie obviousness' under 35 U.S.C. 103, jointly or alternatively, the burden of proof is the same...[footnote omitted]." The burden of proof is similar to that required with respect to product-by-process claims. *In re Fitzgerald*, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980) (quoting In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977)).

2145 Consideration of Applicant's Rebuttal Arguments [R-3]

# I. ARGUMENT DOES NOT REPLACE EVIDENCE WHERE EVIDENCE IS NECESSARY

Attorney argument is not evidence unless it is an admission, in which case, an examiner may use the admission in making a rejection. See MPEP § 2129 and § 2144.03 for a discussion of admissions as prior art.

The arguments of counsel cannot take the place of evidence in the record. *In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965); *In re Geisler*, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997) ("An assertion of what seems to follow from common experience is just attorney argument and not the kind of factual evidence that is required to rebut a *prima facie* case of obviousness."). See MPEP § 716.01(c) for examples of attorney statements which are not evidence and which must be supported by an appropriate affidavit or declaration.

**ARGUMENT B:** Applicant argues that "the rejections under 35 USC 103 are also improper because even if combined, the cited references and what is characterized as AAPA fail to disclose, teach or suggest all of the requirements of the claims" (p. 30, II. 7-22). The supporting arguments are as follows:

- (1) Regarding claims 12-24, with claim 12 as exemplary: It is not implicit in Cristofich that no attempt is made to expose an order for possible price improvement, as claimed in the automatic execution step (p. 31, l. 9- p. 32, l. 4).
- (2) Regarding claims 42-57, with claim 42 as exemplary: "Neither Cristofich, nor what is characterized as AAPA disclose all of these requirements and the Examiner has provided absolutely no support for the statement that a comparing step involved in validating an order for automatic execution is implicit. Withdrawal of the rejection is respectfully requested." (p. 32, II. 19-22).
- (3) Regarding claims 87-89, with claim 87 as exemplary: Applicant argues that "As above, applicants submit that there is no AAPA, and the stated reason for combining

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Cristofich, AAPA and Hasbrouck provides no particular bases for combination of these particular references in the way that the Examiner proposes. Again, the Examiner is relying on hindsight to combine unrelated references, using applicants specification as a roadmap. Withdrawal of the rejection is respectfully requested." (p. 33, Il. 13-17).

(4) Regarding all pending claims, "There is nothing in Cristofich that discloses or suggests an indicator requesting automatic execution". (p. 33, II. 22-23).

#### **RESPONSE:**

Applicant has conceded the various portions of Cristofich used in the rejections which he has not traversed as prior art due to the failure to traverse or challenge the rejection of the following limitation elements in claims 12-24 in Applicant's response:

- automatically receiving a securities order;
- automatically determining whether the securities order includes includes an indicator requesting automatic execution;
- exposing the order for possible price improvement if the securities order does not include an indicator requesting automatic execution.
- (1) Regarding claim 12 as exemplary, please see the new rejection rationale presented in regards to claim 12, particularly the section beginning on page 3, line 15 through page 4, line 4. This new rationale is presented in response to Applicant's amendments to claim 12, which also in turn responds to Applicant's traversal of claims 12-24.
- (2), (3), (4) Please see the response to Argument A. (4) above.

## Conclusion

8. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Siegfried Chencinski whose telephone number is (571)272-6792. The Examiner can normally be reached Monday through Friday, 9am to 6pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's

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supervisor, Alexander Kalinowski, can be reached on (571) 272-6771.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks, Washington D.C. 20231

or (571)273-8300 [Official communications; including After Final communications labeled "Box AF"]

or (571) 273-6792[Informal/Draft communications, labeled "PROPOSED DRAFT"]

Hand delivered responses should be brought to the address found on the above USPTO web site in Alexandria, VA.

SEC

March 29, 2008

ALEXANDER KALINOWSKI SUPERVISORY PATENT EXAMINER

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